Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Biennial Regulatory Review – Amendment of	)	WT Docket No. 03-264
Parts 1, 22, 24, 27, and 90 to Streamline and	)	
Harmonize Various Rules Affecting Wireless	)	
Radio Services	)	

COMMENTS OF THE NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL

The National Public Safety Telecommunications Council (NPSTC) submits these Comments in response to the Commission's pending *Further Notice of Proposed Rulemaking* (FNPR) in this proceeding. The FNPR addresses whether to raise the radiated power (EIRP limits) for broadband PCS (Part 24), Advanced Wireless Services (AWS) (Part 27) and Cellular systems (Part 22) and whether a new methodology to calibrate EIRP should be adopted.[1] NPSTC's focus is the effect of the proposals in bands where there are adjacent public safety communications. Specifically, NPSTC opposes any change to the standard of measurement for radiated power limits or in raising power limits in the 800 MHz band until the ongoing reconfiguration is completed. NPSTC urges that prior to any change in the methodology to measure and determine power limits or in the power limits themselves the record reflect quantifiable evidence that no adverse affect on any adjacent public safety operations will accrue.

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[1] In the Matter of Biennial Regulatory Review- Amendment of Parts 1, 22, 24 , 27 and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, *Further Notice of Proposed Rulemaking*, WT Docket 03-264, FCC 05-144 (August 9. 2005).

The National Public Safety Communications Council

NPSTC serves as a resource and advocate for public safety organizations in the United States on matters relating to public safety communications. NPSTC is a federation of public safety associations dedicated to encourage and facilitate through a collective voice the implementation of the Public Safety Wireless Committee (PSWAC) and the 700 MHz Public Safety National Coordination Committee (NCC) recommendations. NPSTC explores technologies and public policies involving public safety agencies, analyzes the ramifications of particular issues, and submits comments to governmental bodies with the objective of furthering public safety communications worldwide. NPSTC serves as a standing forum for the exchange of ideas and information for effective public safety telecommunications. The following thirteen organizations participate in NPSTC:

American Association of State Highway and Transportation Officials
American Radio Relay League
American Red Cross
Association of Public-Safety Communications Officials-International
Forestry Conservation Communications Association
International Association of Chiefs of Police
International Association of Emergency Managers
International Association of Fire Chiefs
International Association of Fish and Wildlife Agencies
International Municipal Signal Association
National Association of State Emergency Medical Services Directors
National Association of State Telecommunications Directors
National Association of State Foresters

Several federal agencies are liaison members of NPSTC and active participants in its efforts. These include the Department of Agriculture, Department of Homeland Security (SAFECOM Program and the Federal Emergency Management Agency),

Department of the Interior and the Department of Justice (National Institute of Justice, Communications Technology (CommTech)).

The Commission's Radiated Power Rules

The Commission's radiated power rules are the core technical rules whose fundamental purpose is to limit the interference potential of wireless systems while providing sufficient technical flexibility to allow for efficient provision of telecommunications services. The transmitting power rules for broadband PCS are contained in Section 24.232 of the Commission's Rules; for Advanced Wireless Systems (AWS) in Section 27.50(d); and for Cellular systems in Section 22.913. The PCS and AWS rule limits the peak radiated power of base stations, while the cellular rule states that the radiated power must not exceed the stated value. Public safety agencies rely on similar rules in Part 90 to ensure that their own operations do not cause interference and depend on the overall rules for protection from other services that would otherwise disrupt public safety communications.

The Commission's FNPR relates to the wireless industry's advocacy that current EIPR rules unreasonably limit new wideband technologies. The industry contrasts the ability of a GSM systems to operate within 1 MHz with PCS systems that operate within 5 MHz and the lower average power requirements of the of the latter. The Cellular Telecommunications and Internet Association (CTIA) submitted a comprehensive proposal addressing Parts 24 and 27 services that essentially allow a wideband system to match the power levels allowed for GSM or CDMA. The FNPR seeks comment on the proposal not only in the context of whether to raise the radiated power for broadband PCS (Part 24) and Advanced Wireless Services (AWS)(Part 27) but also Cellular

systems in Part 22.

CTIA proposes that the Commission revise its PCS radiated power rules in Part 24 to limit average EIRP for broadband PCS stations having an antenna height of up to 300 meters above average terrain to the larger of: (1) 1640 Watts per carrier (3280 Watts in rural areas) which is the current rule, and (2) 3280 Watts per MHz of emission bandwidth (6560 Watts per MHz of emission bandwidth in rural areas). For stations using an antenna height greater than 300 meters above average terrain, CTIA proposes that the "per MHz" limit be set to 1640 rather than 3280 Watts.

The proposal adds a power density methodology to the rules. It would allow more radiated power, the precise amount being proportional to the emission bandwidth, although stations operating at bandwidth of less than 500 kHz would remain at current levels. For bandwidth more than 500 kHz, CTIA proposes increasing the maximum radiated power limits. CTIA's proposal is intended to "enable coverage over larger geographic areas in rural areas and improve coverage outdoors, indoors, and in vehicles in urban areas.[2]

NPSTC's concerns relate not to the broadband PCS and other bands where there are no adjacent public safety operations but to the effect of the density model and amended power limits where adjacent public safety communications are authorized, including where intercategory sharing is allowed.

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[2] *Ex P*arte letter of Paul Garnett, Regulatory Policy Director, Cellular Telecommunications and Internet Association, dated October 20, 2004 to Ms. Marlene H. Dortch, Secretary to the Federal Communications Commission, in WT Docket 03-264.

800 MHz Band Reconfiguration

On August 6, 2004, the Commission addressed the challenge of interference among competing services, including public safety, in the 800 MHz band.[3] The Commission found that the interference environment was caused by a fundamentally incompatible mix of two types of communications systems: cellular architecture multi cell systems- used by ESMR and cellular telephone licenses—and the high site non cellular systems used by public safety, private wireless and some SMR licensees. The Commission's objective was to abate the unacceptable interference to public safety systems, provide an equitable solution with a minimum of disruption, promote responsible spectrum management and provide additional 800 MHz spectrum to public safety agencies.

The Commission's *Order* adopted a two prong solution. The first was to embrace a new objective definition of "unacceptable interference" to determine when public safety and other non cellular licensees are entitled to protection. The Order also imposed strict responsibility for eliminating interference on specific categories of licensees. The second prong reconfigured the 800 MHz band to separate the services more emphatically. The Order established technical standards relating to interference protection for the transition period and to the permanent 800 MHz band reconfiguration.

The Commission's work in the 800 MHz proceedings and the general embrace by public safety and other sectors of its decision is premised on the technical analysis underlying the interference protections now prescribed. The technical analysis was based

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[3] In the Matter of Improving Public Safety Communications in the 800 MHz Band, *Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order and Order,* WT Docket 02-55, FCC 04-168 (August 2, 2004).

on the power levels and standards of measurement of the current rules. The Commission's Order brought resolution and clarity to an environment beset by controversy. Public and private licensees are now engaged in the transition to the reconfigured 800 MHz band.

The Proposals to Calibrate and Increase Power Levels

NPSTC comprehends the purpose of CTIA's proposal to gain greater efficiency in the use of the spectrum through higher power levels and does not challenge its sincerity to protect other services. Yet the Commission's 800 MHz decision is too far reaching and its technical underpinnings too reliant on current rules addressing power levels to change either the standard by which power is measured or to increase the power of a transmitter until reconfiguration is completed. Moreover, the history of the 800 MHz band leading to the reconfiguration is a caution to proposals of higher power levels and revised measurement standards promoting such in a spectrum environment where various technologies must coexist.

In establishing the technical parameters determining when the interference protections accorded public safety communications and other services are breached, the Commission quantified its rules to reflect technologies being deployed in the 800 MHz band. The analysis and the rules that emerged took place in a context of the Commission's current radiated power rules, specifically those relating to cellular systems and the specific value assigned. The Commission's 800 MHz Order brought resolution and certainty to a decade long controversy. The underlying standards such as how power levels are measured and what those values are should not be altered with regard to the 800 MHz band until reconfiguration is complete.

More generally, the proposal to alter present standards of measurement and to increase power levels overall, is deserving of more quantified analysis that addresses where and what the impact will be on adjacent public safety services. The Commission itself notes that it is unclear the degree the proposed power levels and the model that will be source of measuring the levels compare to the actual power levels currently used by licensees in their systems.[4] The present record remains abstract not only in terms of how the proposal will affect adjacent services but what adjacent services will be involved. Ultimately, the record must show that the interference potential between licensees is not raised. Particular focus should be directed to systems and technologies on adjacent frequencies that are incompatible. Any model adopted should be comprehendible by licensees and frequency coordinators.

NPSTC's caution emanates from a direction in the FNPR that the spectral density model will become the model for all services to measure power limits. In contrast to other services, public safety Part 90 communications remains a radio service of detailed parameters, critical toward promoting access to spectrum by an enormous number of agencies, an environment not compatible with the market approaches of other services. NPSTC reiterates to the Commission that models of measurement that have as their purpose increased power levels must be compatible with adjacent services using different technologies. A model that allows flexibility, including increase power levels within one service, only to create havoc with an adjacent service, will disrupt both.

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[4] FNPR at para 52.

Conclusion

NPSTC urges the Commission to make no changes in the manner by which power levels are measured or in the quantitative levels of those limits in the 800 MHz frequency band until the reconfiguration of the band is complete. With regard to changes once rebanding is complete, as well as in other bands that are adjacent to public safety operations, NPSTC believes that an analysis of how the new measurement model and the accompanying increase power levels have on adjacent services must be performed to show that no adverse affect will accrue.

Respectfully submitted,

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CERTIFICATION

On December 19, 2005, a copy of the foregoing Comments of the National Public Safety Telecommunications Council was filed in the Commission's electronic filing system.